Code: 9F00105

MCA I Semester Supplementary Examinations, October/November 2013
DATA STRUCTURES

Time: 3 hours   Max Marks: 60

Answer any FIVE questions
All questions carry equal marks
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1 (a) Write a C program to multiply two matrices.
  (b) What is a string? Explain any three string handling functions with their syntax and example.

2 (a) Discuss in detail about the polynomial representation.
  (b) Write short notes on circular linked lists.

3 (a) Write a procedure to evaluate a postfix expression. Explain it with a suitable example.
  (b) Give brief description about the linked representation of stacks.

4 (a) Explain with suitable examples, the various operations that can be performed on queues.
  (b) Write short notes on the applications of queues.

5   Discuss in detail about the following sorting techniques:
  (a) Selection sort.
  (b) Merge sort.

6 (a) Distinguish between linear search and binary search.
  (b) Describe in detail about the inverted tables.

7   Explain in detail about the various operations that can be performed on binary search trees.

8 (a) Give brief description about the height balanced trees.
  (b) Explain the deletion operation using the B-Trees.

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